To: Garbow, Avi[Garbow.Avi@epa.gov]

Cc: Mitchell, Stacey[Mitchell.Stacey@epa.gov]; EOC Public

Information[EOC\_Public\_Information@epa.gov]; Colaizzi, Jennifer C.[Colaizzi.Jennifer@epa.gov]; Hull, George[Hull.George@epa.gov]; Smith, Roxanne[Smith.Roxanne@epa.gov]; Michaud,

John[Michaud.John@epa.gov]; Davis, Tim[Davis.Tim@epa.gov]; Valentine,

Julia[Valentine.Julia@epa.gov]

From: Purchia, Liz

**Sent:** Thur 8/13/2015 3:19:37 AM

Subject: Re: NEED REVIEW ASAP: Messaging of Data in EOC

Flags were made and there are edits. Not sure when we'll have a revised version for you to look at but I'm told folks in the region are working on it now. Please stand by.

From: Garbow, Avi

Sent: Wednesday, August 12, 2015 10:39 PM

To: Purchia, Liz

Cc: Mitchell, Stacey; EOC Public Information; Colaizzi, Jennifer C.; Hull, George; Smith, Roxanne;

Michaud, John; Davis, Tim; Valentine, Julia

Subject: Re: NEED REVIEW ASAP: Messaging of Data in EOC

Liz

Assuming the scientific and technical information is accurate, neither Stacey nor me see any legal concerns.

Avi

Avi S. Garbow General Counsel U.S. Environmental Protection Agency

Sent from my iPhone

On Aug 12, 2015, at 10:28 PM, Purchia, Liz <Purchia.Liz@epa.gov> wrote:

We need review of the messaging ASAP Statement below. This is only CO data. The rest will be worked on and figured out tomorrow. This is approved by the JIC and cleared with the Sheriff and local officials.

We're waiting on PDF data charts for the web. I have my entire team standing by ready to push this out. I

## Interpretation of Water Metal Concentrations

EPA initiated a sampling effort on Aug. 5, 2015, to assess the impacts of the blowout at the Gold King Mine near Silverton, Colo. Surface water and sediment samples were collected at intervals beginning on Aug. 5, 2015. At a number of sampling locations, samples have been taken before the contaminant plume reached a sample location and can be used to characterize baseline metals concentrations, to identify the arrival of the plume and monitor the return of river concentrations to baseline conditions. Surface water samples have been analyzed for 24 metals, which include arsenic, cadmium, lead, mercury and others. Those sampling efforts are ongoing. The data represent validated results of samples collected from Aug. 5 to Aug. 9, 2015. Although sediment sampling has also commenced, at this time the data analysis and validation are not complete and, therefore, the results will not be presented.

The determination of lingering impacts to the river is based upon a comparison of detected metal concentrations after the plume passed a sampling location with site-specific background concentrations. Background values were defined for the Animas River from the Silverton, Colo. area to the Durango municipal water intake.

Any detection that exceeded background levels was compared with screening criteria for recreational water use. In addition, they were compared to Colorado's criteria for agricultural use, including both ingestion by livestock and irrigation uses.

Cement Creek and Animas River from Silverton to the Southern Colorado Boarder

Surface water quality samples were collected from nine locations in Colorado. Two of these were from Cement Creek and seven were from the Animas River. These locations were selected because an historical dataset already exists for these locations. Therefore, they will serve as good indicators of conditions before, during and after the event.

The graphs identify trends in concentrations of some of these metals that have been detected historically in both Cement Creek and the Animas River. Each graph shows the trends in those concentrations between Aug. 5 and Aug. 9, 2015. Historical concentrations are not available for the 32nd Street Bridge location. The blowout occurred late in the morning on Aug. 5, 2015. The contaminant plume moved downstream at approximately four miles per hour. The trends over time and location represent the movement of the contamination of the water in the Animas River and show the recovery of the river at those same locations.

The comparison of river metal concentrations after the plume has moved past these sampling points to pre-event conditions demonstrated that water quality returned to pre-event conditions. At this time, the sediment has not been fully analyzed nor have the data been validated.